Appendix D. Datasheets and Instructions for Volunteers Participating in National Capital Network Bird Inventories.

National Capital Region Bird Inventory

Dear Participant,

Thank you for participating in The National Park Service Bird Inventory. The National Capital Region of the National Park Service initiated the Inventory and Monitoring Program in 1999 to identify at least 90% of all expected vertebrates and vascular plants in each park. The information will provide a basis for the management of the parks' natural resources and set the stage for implementing long-term monitoring of the region's ecosystems. Bird inventories are almost complete, but gaps in our knowledge still exist. You assistance will help us complete the inventories and identify areas that may be important to species of conservation concern.

We are conducting bird inventories during each month of the year to identify breeding, wintering, and migrating species in the region. During the surveys, volunteer participants record the presence, abundance, and status of bird species detected in each sector of a park. The data is returned to the park or entered into an online database. For the first year of this project we are focusing our efforts on six National Parks: Antietam National Battlefield, Catoctin Mountain Park, Harper's Ferry National Historical Park, Manassas Battlefield, Prince William Forest Park, and Wolf Trap National Park.

Enclosed you will find 1) a map of your selected park, 2) datasheets, 3) description of Status Codes, and 4) Frequently Asked Questions (FAQ) about the Bird Inventory. Please contact your group leader (noted below) or Marcus Koenen, Biological Inventories Coordinator, if you have any questions at (202) 342-1443 Ext. 216 or Marcus_Koenen@nps.gov.

Summary Methodology:

1. Group Leader coordinates visits to your selected parks. Your group leader is_____
   Tele:_____

2. Visit the park monthly.

3. We suggest that you spend at least 5 hours in the field per month. Because birds are most sensitive during the breeding period, it is advised to limit visits to small groups (4 people or less) during this period. Sites should not be visited for 4 days after the last survey to reduce disturbance.

4. Please fill out one data sheet per section per visit. Be sure to fill it out using the appropriate breeding status codes. Also, keep track of the date of your visit, your name and contact information, starting and ending time, total number of participants, how much time was spent in the park, and weather.

5. Keep records for all species including exotics such as Starlings or House Sparrows. Please pay special attention to the presence and status of species of concern at each preserve (see species in bold on the datasheet).

6. Turn in completed data sheets to group leader or: Marcus Koenen, Biological Inventories Coordinator, NPS, 4598 MacArthur Blvd. NW, Washington, DC 20007. Please make and keep copies before mailing the original data sheets.

The National Park Service Bird Inventory Datasheet

Name:	**Park:**
Address:	**Date:**
	Name of participants:
Phone:	
E-Mail:	
Start Time: **End Time:** **Total hrs:**	**Weather: Sunny Partly Cloudy Overcast Drizzle & Calm Windy (>15 mph)**

Instuctions: Please check section number in which each species was noted, provide total number seen, and indicate Status Codes (see Summary of Status Codes on the last page for details). Note all codes that may apply. **Species of concern noted in bold.**

No.	Species	Seen in the Section Numbers: 1	2	3	4	5	6	7	8	9	Total # Seen	Status Code(s)	Notes
1	Pied-Billed Grebe												
2	Red-Necked Grebe												
3	Double-Crested Cormorant												
4	**American Bittern**												
5	**Least Bittern**												
6	Great Blue Heron												
7	Great Egret												
8	Snowy Egret												
9	Little Blue Heron												
10	Tricolored Heron												
11	Green Heron												
12	Black-Crowned Night-Heron												
13	Tundra Swan												
14	Greater White-Fronted Goose												
15	Snow Goose												
16	Canada Goose												
17	Wood Duck												
18	Green-Winged Teal												
19	**American Black Duck**												
20	Mallard												
21	Northern Pintail												
22	Blue-Winged Teal												
23	Northern Shoveler												
24	American Wigeon												
25	Canvasback												
26	Redhead												
27	Ring-Necked Duck												
28	Greater Scaup												
29	Lesser Scaup												

No.	Species	Seen in the Section Numbers: 1	2	3	4	5	6	7	8	9	Total # Seen	Status Code(s)	Notes
30	Oldsquaw												
31	Black Scoter												
32	Surf Scoter												
33	White-Winged Scoter												
34	Common Goldeneye												
35	Bufflehead												
36	Hooded Merganser												
37	Common Merganser												
38	Red-Breasted Merganser												
39	Ruddy Duck												
40	Black Vulture												
41	Turkey Vulture												
42	Osprey												
43	Bald Eagle												
44	Northern Harrier												
45	Sharp-Shinned Hawk												
46	Cooper's Hawk												
47	Red-Shouldered Hawk												
48	Broad-Winged Hawk												
49	Red-Tailed Hawk												
50	Rough-Legged Hawk												
51	American Kestrel												
52	Merlin												
53	**Peregrine Falcon**												
54	Wild Turkey												
55	**Northern Bobwhite**												
56	King Rail												
57	Virginia Rail												
58	Sora												
59	Common Moorhen												
60	American Coot												
61	Black-Bellied Plover												
62	American Golden-Plover												
63	Semipalmated Plover												
64	Killdeer												
65	Greater Yellowlegs												
66	Lesser Yellowlegs												
67	Solitary Sandpiper												

No.	Species	Seen in the Section Numbers: 1	2	3	4	5	6	7	8	9	Total # Seen	Status Code(s)	Notes
68	Willet												
69	Spotted Sandpiper												
70	Upland Sandpiper												
71	Whimbrel												
72	Ruddy Turnstone												
73	Red Knot												
74	Sanderling												
75	Semipalmated Sandpiper												
76	Western Sandpiper												
77	Least Sandpiper												
78	White-Rumped Sandpiper												
79	Baird's Sandpiper												
80	Pectoral Sandpiper												
81	Dunlin												
82	Stilt Sandpiper												
83	Long-Billed Dowitcher												
84	Common Snipe												
85	**American Woodcock**												
86	Wilson's Phalarope												
87	Red-Necked Phalarope												
88	Red Phalarope												
89	Laughing Gull												
90	Bonaparte's Gull												
91	Ring-Billed Gull												
92	Herring Gull												
93	Iceland Gull												
94	Glaucous Gull												
95	Great Black-Backed Gull												
96	Caspian Tern												
97	Common Tern												
98	Forster's Tern												
99	Black Tern												
100	Rock Dove												
101	Mourning Dove												
102	Black-Billed Cuckoo												
103	Yellow-Billed Cuckoo												
104	Barn Owl												
105	Eastern Screech-Owl												

No.	Species	Seen in the Section Numbers: 1	2	3	4	5	6	7	8	9	Total # Seen	Status Code(s)	Notes
106	Great Horned Owl												
107	Snowy Owl												
108	Barred Owl												
109	Short-Eared Owl												
110	Northern Saw-Whet Owl												
111	Common Nighthawk												
112	Whip-Poor-Will												
113	Chimney Swift												
114	Ruby-Throated Hummingbird												
115	Belted Kingfisher												
116	Red-Headed Woodpecker												
117	Red-Bellied Woodpecker												
118	Yellow-Bellied Sapsucker												
119	Downy Woodpecker												
120	Hairy Woodpecker												
121	Northern Flicker												
122	Pileated Woodpecker												
123	Olive-Sided Flycatcher												
124	Eastern Wood-Pewee												
125	Yellow-Bellied Flycatcher												
126	**Acadian Flycatcher**												
127	Alder Flycatcher												
128	Willow Flycatcher												
129	Least Flycatcher												
130	Eastern Phoebe												
131	Great Crested Flycatcher												
132	Eastern Kingbird												
133	Horned Lark												
134	Purple Martin												
135	Tree Swallow												
136	Northern Rough-Winged Swallow												
137	Bank Swallow												
138	Cliff Swallow												
139	Barn Swallow												
140	Blue Jay												
141	American Crow												
142	Fish Crow												
143	Black-Capped Chickadee												

No.	Species	Seen in the Section Numbers: 1	2	3	4	5	6	7	8	9	Total # Seen	Status Code(s)	Notes
144	Carolina Chickadee												
145	Tufted Titmouse												
146	Red-Breasted Nuthatch												
147	White-Breasted Nuthatch												
148	Brown Creeper												
149	Carolina Wren												
150	House Wren												
151	Winter Wren												
152	Marsh Wren												
153	Golden-Crowned Kinglet												
154	Ruby-Crowned Kinglet												
155	Blue-Gray Gnatcatcher												
156	Eastern Bluebird												
157	**Veery**												
158	Gray-Cheeked Thrush												
159	Swainson's Thrush												
160	Hermit Thrush												
161	**Wood Thrush**												
162	American Robin												
163	Gray Catbird												
164	Northern Mockingbird												
165	Brown Thrasher												
166	American Pipit												
167	Cedar Waxwing												
168	European Starling												
169	White-Eyed Vireo												
170	Blue-Headed Vireo												
171	Yellow-Throated Vireo												
172	Warbling Vireo												
173	Philadelphia Vireo												
174	Red-Eyed Vireo												
175	Blue-Winged Warbler												
176	**Golden-Winged Warbler**												
177	Tennessee Warbler												
178	Orange-Crowned Warbler												
179	Nashville Warbler												
180	Northern Parula												
181	Yellow Warbler												

No.	Species	Seen in the Section Numbers: 1	2	3	4	5	6	7	8	9	Total # Seen	Status Code(s)	Notes
182	Chestnut-Sided Warbler												
183	Magnolia Warbler												
184	Cape May Warbler												
185	Black-Throated Blue Warbler												
186	Yellow-Rumped Warbler												
187	Black-Throated Green Warbler												
188	Blackburnian Warbler												
189	**Yellow-Throated Warbler**												
190	Pine Warbler												
191	**Prairie Warbler**												
192	Palm Warbler												
193	Bay-Breasted Warbler												
194	Blackpoll Warbler												
195	**Cerulean Warbler**												
196	Black-And-White Warbler												
197	American Redstart												
198	**Prothonotary Warbler**												
199	**Worm-Eating Warbler**												
200	Ovenbird												
201	Northern Waterthrush												
202	**Louisiana Waterthrush**												
203	**Kentucky Warbler**												
204	Connecticut Warbler												
205	Mourning Warbler												
206	Common Yellowthroat												
207	**Hooded Warbler**												
208	Wilson's Warbler												
209	Canada Warbler												
210	Yellow-Breasted Chat												
211	Summer Tanager												
212	**Scarlet Tanager**												
213	Northern Cardinal												
214	Rose-Breasted Grosbeak												
215	Blue Grosbeak												
216	Indigo Bunting												
217	Eastern Towhee												
218	American Tree Sparrow												
219	Chipping Sparrow												

No.	Species	Seen in the Section Numbers: 1	2	3	4	5	6	7	8	9	Total # Seen	Status Code(s)	Notes
220	**Field Sparrow**												
221	Vesper Sparrow												
222	Savannah Sparrow												
223	**Grasshopper Sparrow**												
224	**Henslow's Sparrow**												
225	Fox Sparrow												
226	Song Sparrow												
227	Swamp Sparrow												
228	White-Throated Sparrow												
229	White-Crowned Sparrow												
230	Dark-Eyed Junco												
231	Snow Bunting												
232	Bobolink												
233	Red-Winged Blackbird												
234	Eastern Meadowlark												
235	Rusty Blackbird												
236	Common Grackle												
237	Brown-Headed Cowbird												
238	Orchard Oriole												
239	Baltimore Oriole												
240	Purple Finch												
241	House Finch												
242	Red Crossbill												
243	White-Winged Crossbill												
244	Common Redpoll												
245	Pine Siskin												
246	American Goldfinch												
247	Evening Grosbeak												
248	House Sparrow												

Summary of Status and Habitat Codes

Status Codes - Use status codes to describe the behavior of a species. Use all codes that apply. **See Description of Status Codes for details.**

Observed (OB): Species was observed. **Migrant (MG):** Observed; not seen more than 2-month during the year Seen during the species' spring or fall migration. is not a breeding or a winter resident. **Winter Resident (WR):** Seen for more than 2 months during the winter period. No breeding evidence found. **Possible Nesting (PO):** Species seen in suitable nesting habitat. E.g. Singing male.	**Probable Nesting (PR):** Any one or more of the following behaviors was seen: PR-M = 7 or more singing males PR-S = Singing male on territory PR-P = Pair (male and female) PR-T = Territory defense PR-C = Courtship, copulation PR-V = Visiting potential nest site PR-A = Agitated behavior PR-B = Nest building by wrens and woodpeckers.	**Confirmed Nesting (CO):** Any one or more of the following behaviors was seen: CO-CN = Bird with nesting material CO-PE = Physiological Evidence CO-NB = Nest Building (all others) CO-UN = Used Nest CO-DD = Distraction Display CO-ON = Occupied Nest CO-FC = Food Carry CO-FS = Fecal Sac CO-NE = Nest with Eggs CO-NY = Nest with Young CO-FL = Fledgling

National Capital Region Bird Inventory

DESCRIPTION OF STATUS CODES

General Status

Observed (OB) Species observed in a section. This code applies when no other codes apply. Examples include when vultures or raptors are flying overhead, herons or egrets are foraging with no indication of a rookery, or ducks are summering on a pond.

Migrant (MG) Species are observed during its migration cycle. May be seen for no more than 2 months out of a year.

Winter Resident (WR) Species seen during the species' wintering period. May spend more than 2 months out of a year in a park but is not known to breed there.

Breeding Status

The following status definitions are based on standard Breeding Bird Atlas methodology.

Possible (PO) Species encountered in suitable nesting habitat during its breeding season, such as a Virginia Rail in a marsh or Scarlet Tanager feeding in an oak woodlot in June. Also use this code for a male singing in a likely nesting area on only one occasion. If heard on a second trip in the same place, it may qualify as Probable (see below).

Probable (PR) Probable nesting species encountered may meet any one or more of the following criteria:

- **(PR-M)** Multiple singing or territorial birds of a species detected within a section on one day. Seven singing individuals is an appropriate level of abundance.
- **(PR-S)** Single singing male present at same location on at least two occasions 7 or more days apart. This behavior presumes a permanent territory.
- **(PR-P)** Pair (male and female) observed in suitable nesting habitat during the breeding season. Assumes that it is fairly certain that a mated pair of birds has been observed.
- **(PR-T)** Permanent Territory presumed through defense of breeding territory by fighting or chasing individuals of same species. Because territoriality involves the defense of a fixed area, it is useful to map locations of individuals to determine if they are singing or defending the same general area when surveying the block a week or more later.
- **(PR-C)** Courtship behavior or copulation between a male and female. Courtship behavior includes transfer of food, displays, and grooming between a pair of birds.
- **(PR-V)** Bird is observed visiting the same likely nest site repeatedly but a nest has not been identified. Examples include cavity nesters or for a shrub-nesting species that flies into the same thicket and disappears on several occasions.
- **(PR-A)** Agitated behavior or anxiety calls from adults usually indicate a nest site or young in the vicinity. This does not include agitation induced by "spishing", predators, or using taped calls.
- **(PR-B)** Nest building by wrens or excavation of cavities by woodpeckers. Wrens may build "dummy" nests before the female selects a nest. Woodpeckers will drill holes for roosting.

Confirmed (CO) Confirmed nesting species may meet any one or more of the following criteria:

- **(CO-NM)** Bird seen carrying nesting material such as sticks, grass, mud, cobwebs, etc.
- **(CO-PE)** Physiological Evidence of breeding based on birds in the hand. (Note: this can only be determined by bird banders and includes such evidences as a highly vascularized swollen incubation (brood) patch or an egg in the oviduct).
- **(CO-NB)** Nest building seen at the actual nest site, excluding wrens and woodpeckers.
- **(CO-DD)** Distraction Displays, defense of unknown nest or young, or injury feigning. Killdeers may give a "broken wing" act, a Cooper's Hawk may dive at you near the nest site, or an Ovenbird may run about with wings fluttering.

(CO-UN) Used nest or eggshells found. Use this only for carefully identified eggshells and nests. If identification is unsure, forget it. Do not collect a nest.

(CO-ON) Bird on the nest; may have been flushed off nest or seen incubating.

(CO-FC) Adult bird carrying food for young or feeding recently fledged young. Use this criteria with caution. Some adults carry food a long distance or may be engaged in courtship feeding. Others such as the Common Grackle or Blue Jay may carry food away to consume it themselves. One of the best signs to look for is the repeated carrying of food in the same direction.

(CO-FS) Adult bird seen carrying fecal sac. Many passerine adults keep their nests clean by carrying membranous, white fecal sacs away from the nest.

(CO-NE) Nest with eggs or eggshells on ground. Nest and eggs must be accurately identified. If a cowbird is found in nest, use code for both the cowbird and the host species. Be careful not to disturb the vicinity of the nest and do not remove the cowbird!

(CO-NY) Nest with young seen or heard. Take care not to cause premature flushing of nestlings from nest. Presence of cowbird young confirms both the cowbird and the host species.

(CO-FL) Recently fledged young or downy young. This includes dependent young only. Be cautious of species that range widely soon after fledging. One of the best features to look for is the length of the tail feathers. If shorter than the adults, the young probably originated locally. Young cowbirds begging for food confirm both the cowbird and the host species.

Examples of Breeding Code Use

The following are examples of situations that may be encountered during atlasing to serve as guidelines in assigning codes. If in doubt, consult with your Group Leader of Biological Inventories Coordinator.

Cormorants, gulls, or waterfowl (or cripples) summering on lake without suitable breeding habitat: Species Observed **(OB)**.

Cormorants or ducks in adult plumage summering on a lake with suitable breeding habitat, but no display or broods: Possible **(PO)**.

Herons or egrets (colonially nesting species) observed in marshes or along waterways away from nesting colony: Observed **(OB)**.

Green Heron or bitterns (non-colonial nesting species) observed in appropriate nesting habitat: Possible, Probable, or Confirmed, depending on breeding evidence obtained.

Black-crowned Night-Heron in subadult plumage during early summer: Observed **(OB)**.

Woodcock nuptial flights and Ruffed Grouse heard drumming: Possible **(PO)** if seen or heard only once (after departure of transient birds). Probable **(PR-S)** if seen or heard 7 or more days apart at that location. Probable **(PR-C)** if courtship and display to female observed.

Shorebirds that normally breed in tundra areas and are seen in marshes or on a mud flat: Observed **(OB)** if seen during the summer or Migrant **(MG)** depending if seen over several weeks during the migration period or Winter Resident **(WR)** if seen over several month during the winter.

Rails heard in a marsh early in breeding season but not relocated on subsequent visits: Possible **(PO)** because of their elusive nature.

Gulls frequenting plowed fields, lawns, etc. throughout the summer in unsuitable breeding habitat: Observed **(OB).**

Killdeer doing broken-wing distraction display along roadside but young not seen; Confirmed **(CO-DD).**

Male and female Scarlet Tanager observed together several times in same area but no nest ever seen: Probable **(PR-P).**

Male House Wren sings all summer and stuffs nesting boxes with sticks but no evidence of a mate or fledglings: Possible **(PO).**

Song Sparrow seen carrying nesting material: Confirmed **(CO-CN).**

Wood Thrush seen on nest for an extended period of time but nest too high to see contents: Confirmed **(CO-UN).**

Normal winter or typical spring migrants lingering beyond normal departure dates but no breeding evidence observed: Observed **(OB).**

Second year male American Redstart singing abnormal song in hedgerow in early June: Possible **(PO).**

Kentucky Warbler singing in May on one occasion is a Migrant **(MG).** If seen repeatedly in the same location: Probable **(PR-S).**

National Capital Region Bird Inventory

FREQUENTLY ASKED QUESTIONS (FAQ)

What is the purpose of the Bird Inventory?

- provide a permanent record of the bird species found on National Park Service lands.
- provide baseline data for monitoring future changes in bird populations.
- assess species diversity.
- document abundance and distribution of species of concern.
- provide comparisons with historical studies.
- complement existing or on-going avian monitoring programs in the surrounding areas.
- assist international efforts to preserve neotropical migratory birds.
- help in land use planning by local and state governments.
- bring together birders in an exciting cooperative venture!

What do I do?

Your job, simply stated, is to find out what bird species can be found in the parks. Ideally, you will be able to observe at least 90% of the actual species during each period of the year including breeding, migration, and wintering periods.

What do I need to know to participate?

Participants should be able to identify birds by sight and sound and be willing to spend the minimum suggested time in the field to make detailed observations. Inexperienced volunteers can participate if they go with more experienced birders; more eyes in the field generally improve the quality of the data and make the project a more enjoyable experience for everyone.

How much time will it take?

We suggest that at least 5 hours in the field per month is adequate. Of course, the more time spent in the field the better your chances of finding evidence of rare or unusual species. Depending on results, we may suggest increasing the time or reducing the minimum time.

When should I be in the field?

Keep in mind that birds are most active in the mornings before 10:00 am. Some species such as nightjars and owls will be more readily found at dawn or dusk. Because birds are most sensitive during the breeding period, it is advised to limit visits to small groups (4 or less) during this period. Sites should not be visited for 4 days after the last survey to reduce disturbance.

What do I need?

Beyond the birding talent you have developed over the years, the actual materials you'll need for the Bird Inventory are minimal.

Your responsibility:
- transportation to your park
- road map so you can get to your park
- binoculars
- pencil (Nos. 2 or 3 are best) with eraser
- paper or notebook for recording extra details
- hiking gear and first aid kit, if appropriate
- camera, if you wish
- patience
- clipboard for the datasheets

You will be given:

- map(s) of your site or preserve
- a datasheets (with highlighted species of concern) for each site visit to a park.
- as much advice as you want

What's on the Datasheet?

The datasheet contains space for your name, address, and phone, and the names of other observers accompanying you. Record the park you surveyed, the date, and the time you have spent in the field (do not count travel time to and from the area, and do not include any scouting time prior to fieldwork).
For each species seen, note the section of the park, keep a running tab of how many birds were seen in the entire park during the survey, and note all the status codes that apply.

What are the sections?

In order to generate distribution maps of the species you observed, you will need to record species separately for each section of a park. The park map we provided delineates each section. Note that the assigned numbers correspond to the section numbers on the datasheet. The sections are not marked in the parks, so you will need to pay attention to features such as roads and trails to orient yourself to be sure you assign an observation to the correct section. In addition, the group leader will accompany you on the first visit to the park to help you identify each section. Note that because we are using a standard data sheet, there may be more sections on the datasheet than are assigned on the map; please disregard these extra columns on the datasheet. An observation may be made anywhere within the section to be of value. You may enter any portion of a section that is open to the general public. Volunteering for the Bird Inventory does not authorize you to enter restricted areas.

Do I have to count each bird?

The primary purpose of the Bird Inventory is to determine the presence or all birds in the parks. Some measure of their abundance is also desirable. Keep track of the number of birds of a species you see in the field. When you observe more individuals of a species that is already recorded on the datasheet, simply add them to the total number of birds. It may help to keep track of birds with tick marks (e.g. IIII…) to keep a running tab of birds seen rather than to use numbers (e.g. 4).

What status do I assign to each species observed?

Status is based upon the season and behavior observed in the field. In some cases it may not be possible to assign a status until repeated visits have been made. In these cases it is best to simply put OB (Observed). A Kentucky Warbler, for example, may be seen in the spring but it is not know if this is a migrant or is a breeding bird until repeated visits are made to the same location. In these cases simply put OB (Observed) during the first site visit and if a nesting territory is confirmed during a later site visit, you may put PR-S (Probable) on the new datasheet. It may take repeated visits before it is possible to assign a confirm the nesting status for a species. See **Description of Status Codes** for details.

Remember that the codes are rather general, and they will vary in their application for certain species groups. For example, species such as herons and egrets may congregate in potentially suitable breeding habitat with no intention of breeding. Many birds sing, and even occasionally defend territories and gather nest material while wintering or on migration. Use caution and develop a familiarity with the breeding behavior of birds in general.

What are the species of special concern?

Species of special concern are noted on the datasheet in bold print. These birds were identified through long term conservation planning process conducted in conjunction with Partners in Flight. The National Park Service is a member of Partners in Flight, a group of organizations interested in bird conservation. Recently, Partners in Flight has written Bird Conservation Plans (BCP) for each part of the country to identify species that demonstrate declining population trends, face threats on the breeding or wintering grounds, have small breeding areas, or are of concern for other reasons. Generally, species are listed in the regions of the country where they are most common as these areas likely provide good breeding habitat. The bold species on the datasheet are considered of concern for this region and may or may not be found in the parks. If you note a species of concern, please indicate the location on the map. Identifying exact breeding location for species of concern will help us develop and evaluate management and monitoring plans.

How do I proceed?

Please use the datasheets for recording data while you are in the field. If you use something else (say your notebook) you may make mistakes when you later transcribe the data to your datasheets or you may forget to take down certain information. It is best to make all entries in pencil (a Number 2 or 3 works well), and make sure you have a new eraser, since old ones may smudge.

As you find breeding evidence for each species, place the letter for the evidence code in the appropriate column. If you subsequently observe behavior which indicates a different status, simply enter the code for the new category. If you are limited by space, you can add species at the end of the datasheet.

You can also use the margins to note odd occurrences such as nest locations in unexpected places, or anything else that won't fit in the other fields. You don't have to worry about seeking rare species. Other atlas projects have found that while you are following the common species to confirm breeding, you will happen across the less common ones as well.

What if I'm not sure of the ID?

Do not guess! Instead, take detailed notes on every aspect of the plumage you saw, and of any vocalizations heard. Do this immediately in the field. Unless you have a particularly good aural memory, write down your impressions of vocalizations first. Also note the exact location and write down detailed directions. If you are sure you are going to return to the site, you may even wish to mark the spot with a rock cairn or "duck," or tie a rag to a twig so that you can revisit the location with someone with more expertise. (Be sure to remove the rags, and scatter rocks from the duck, on your last visit to the site.)

How do I know when I'm done?

No matter how well you cover the park, you will almost certainly not observe all the species actually present. How do you determine when you have done an adequate job of surveying your area? How do you know when to stop? There are several ways of determining when your coverage of a block is adequate.
We suggest that your coverage is complete when you have observed at least 90% of the species expected in the area based on range maps. We can help you determine that point by comparing your data with our expected species lists for the park you are working in. In some cases, you and the Biological Inventories Coordinator may need to discuss whether additional effort in your park is warranted next season. You might also be asked to revisit your site or preserve to "nail down" a particularly critical species.

How can I enter data online?

For Group Leaders, we ask that you submit data online in addition to submitting copies of the original data sheets. In order to enter data online, please go to our web page (To be Announced). There you will find an online version of the datasheet to enable you to transcribe field data for each site visit. Instructions are provided. You will need to have access to the internet to use this form.

What do I do with the datasheets?

We will archive the datasheets should questions come up about the field data. Please return original datasheets after making copies for yourself to the Group Leader or return to Marcus Koenen, Biological Inventories Coordinator, 4598 MacArthur Blvd. NW, Washington DC 20007. 202-342-1443 Ext 216. Marcus_Koenen@nps.gov. We have found that copies always come in handy if the originals are lost during the mailing or for some other reason.

What if I have a question or suggestion?

If you have a question or suggestion on improving our methodology, maps, datasheets, etc. please let us know through your group leader or contact the Marcus Koenen, Biological Inventories Coordinator, 4598 MacArthur Blvd. NW Washington DC 20007. 202-342-1443 Ext 216. Marcus_Koenen@nps.gov.